OGDEN ARSENAL, FUZE WAREHOUSE
(OGDEN ARSENAL, BUILDING 1609)
(OGDEN ARSENAL, BUILDING 609)
(OGDEN ARSENAL, MUNITIONS STORAGE FACILITY)
6275 Hickory Avenue
Layton Vicinity
Davis County
Utah

HAER No. UT-84-AH

HAER
UTAH
6-LAY.V,
1AH-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
Department of the Interior
Denver, Colorado 80225-0287

HISTORIC AMERICAN ENGINEERING RECORD

OGDEN ARSENAL, FUZE WAREHOUSE
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Location: 6275 Hickory Avenue, West Fuze Plant, Hill Air Force Base, Layton Vicinity, Davis County, Utah

UTM: 12-414710-4555190

Date of Construction: 1942

Architect: Unknown

Builder: Unknown

Present Owner: Hill Air Force Base

Present Use: Munitions Storage

Significance: Anti-tank ammunition fuzes were tested in Building 1609, which provides particularly vivid images of the processes involved in the manufacture of munitions at Ogden Arsenal during World War II. This building, along with other structures at the base, renders a unique picture of the U.S. Army build-up which occurred on the eve of and during World War II.

History: Building 1609 housed the testing and inspection facilities for 37mm anti-tank ammunition fuzes that were produced at Ogden Arsenal during World War II. Random samples of completed fuzes were transferred to Building 1609 from the Fuze Loading Building (Building 1607), where they were tested and evaluated for reliability. The interior spaces of the building consist of a detonator test room, test disassembly room, jumble room, and a jolt & jumble room.

Metal parts such as cartridge cases, projectiles, and fuze components were shipped to Ogden Arsenal from outside manufacturers in a finished state. Although components used in the loading and assembly of 37mm shells had been inspected before shipment to the Arsenal, it was found that a further inspection of critical items before loading would save much time and trouble in

the loading operation. All dimensions of a representative sample of the inert fuzes were measured and the threads and recesses checked before they were loaded with Tetryl pellets and sealed with glue. (Tetryl is a very powerful explosive that is commonly used in the manufacture of primary and secondary charges for blasting caps). Because of its very high melting point it was pressed into pellets rather than melted and cast.)

Fuze bodies were disassembled, inspected, and reassembled with Tetryl pellets in the Fuze Assembly Building (Building 1607). Tetryl pellets were secured in the closing caps of the fuzes with aluminum discs and then screwed onto the fuze body, which contained the firing pin and detonator. Completed fuzes were packed in fiber containers (50 per container) that were placed in wooden packing boxes (8 per box). Loaded skids of fuzes were transferred to the Loading Plants for assembly into 37mm anti-tank ammunition.

Due to the highly volatile nature of the chemicals involved, this building was designed in the "Arsenal Style," with concrete fire-walls that extend through the roofline separating all rooms that housed explosives. This concrete skeleton supports exterior walls that are constructed of lightweight hollow tile blocks that were engineered to absorb and deflect the force of an explosion outward, away from the rest of the building. The broad hip-roof overhang provides shelter for circulation between rooms.

General Description: Building 1609 (50' x 20') is a concrete hollow tile structure. These walls are articulated by exposed concrete columns which divide the longitudinal facades into three uneven bays. Each of the two smaller bays have a set of double steel doors with two window lights, while the larger bay has two steel-framed, nine-pane windows, sitting on a plain lug sill. The remaining windows are original to the structure. The east, north, and south walls maintain their original configurations, though the west wall has been altered by the addition of a steel door and two wall-hung mechanical units. The roof is supported by a light-framed steel truss that is covered with corrugated asbestos roofing. It overhangs approximately five feet from the east wall, with the steel framing exposed on the underside of the eave. Two lightning aerials and two 12-inch diameter copper ventilators with dampers are located along the roof ridge. A third ventilator is located on the back side of the building, off of the ridge line.

BLDG 1609
SCALE 1" = 1'-0"
SHP AMMO MAINT
SURVEYED 13 NOV 78